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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,766	07/28/2003	Ji-Rong Wen	MS1-1616US	5788
22801	7590	09/21/2006	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			VAUGHN, GREGORY J	
			ART UNIT	PAPER NUMBER
			2178	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/628,766

Applicant(s)

WEN ET AL.

Examiner

Gregory J. Vaughn

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 68-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 and 68-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2 pages filed 6/7/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Action Background*

1. This action is responsive to the applicant's response, filed on 6/22/2006.
2. No claims were amended with the response of 6/22/2006.
3. Claims 36-67 are cancelled in response to the election restriction of 11/28/2005.
4. Claims 1-35 and 68-75 are pending in the case, claims 1, 31, 68 and 74 are independent claims.

### *Claim Rejections - 35 USC § 101*

5. 35 U.S.C. 101 reads as follows:  
*"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."*
6. Claims 68-75 remain rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
7. **Regarding claims 68-75**, the claims are directed toward a "system", however the claimed "system" appears to be a computer program per se. The claimed computer program is functional descriptive material.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs, which impart functionality when employed as a computer component. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994). (See MPEP 2106.IV.B.1)

Claims 68-75 are non-statutory because the claimed "system" appears to be a computer program per se, but the computer program is not embodied on a computer readable media.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*"A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States."*

9. Claims 1-35 and 68-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang et al. "HTML Page Analysis Based on Visual Cues" from the 6<sup>th</sup> International Conference on Document Analysis and Recognition (ICDAR 2001), Seattle, Washington, USA, Copyright 2001 (hereinafter Yang).
10. **Regarding independent claim 1**, Yang discloses identifying a plurality of visual blocks in a document and detecting one or more separators between the visual blocks. Yang recites: *"records in one category are normally organized in ways having a consistent visual layout style. Boundaries between different categories are marked apparently with different visual styles or separators. As we have said, the basic idea of our approach is to detect these visual cues"* (page 2, left column, third paragraph). Yang discloses constructing a content structure for the document. Yang recites: *"in section 3 we introduce our heuristics. After that, we talk about our method to detect visual patterns and then to construct document structures based on these heuristics"* (page 2, left column, second paragraph). Yang discloses the content structure identifying, for the different visual blocks, different portions of semantic

content. Yang recites: *"In this paper, we propose a novel method to extract semantic structures from general HTML pages. This method doesn't require a priori knowledge of web pages. It uses features derived directly from layout of HTML pages"* (page 1, last paragraph to page 2, first paragraph).

11. **Regarding dependent claim 2**, Yang discloses web pages in Figure 3 on page 6.
12. **Regarding dependent claim 3**, Yang discloses a document described by a tree structure having a plurality of nodes. Yang's process is directed toward HTML documents. HTML documents are inherently processed by computers in a well-known process commonly referred to as parsing. Yang discloses parsing. Yang recites: *"the process to parse HTML documents and extract simple objects"* (page 2, right column, last paragraph). Parsing is a process where elements of a markup language document are placed into a tree structure in a relative way (i.e. there is a first or root element, with subsequent elements being related to the first as child, and where child elements can further have children). These elements are commonly referred to as nodes. Yang discloses identifying a group of candidate nodes, and for each node in the group: determining whether the node can be divided, and if the node cannot be divided, identifying the node as a visual block. Yang recites: *"During the process to parse HTML documents and to extract simple objects"* (page 2, right column, last paragraph), where Yang describes the simple object as *"None-breakable visual HTML objects"* (page 2, left column, last paragraph).

13. **Regarding dependent claim 4**, Yang discloses setting a degree of coherence for the visual block. The specification defines the degree of coherence as “a *measure of how coherent the visual block is*” (page 15, lines 13-14). Yang recites: “A *modifier equals to zero means that two objects are distinct or can’t be compared*” (page 2, right column, last paragraph).
14. **Regarding claims 5-13**, Yang discloses dividing nodes into their respective child nodes based on criteria related to tags and node properties (including colors and sizes) on page 2, the bottom of the left column to the bottom of the right column.
15. **Regarding claims 14-30**, Yang discloses detecting the one or more separators. Yang recites: “*Boundaries between different categories are marked apparently with different visual styles or separators. As we have said, the basic idea of our approach is to detect these visual cues*” (page 2, left column, third paragraph).
16. **Regarding claims 31-35**, the claims are directed toward a computer-readable media, for the method of claims 1-30 and are rejected using the same rationale.
17. **Regarding independent claims 68-75**, the claims are directed toward a system, for the method of claims 1-30 and are rejected using the same rationale.

***Response to Arguments***

18. Applicant's arguments filed 6/22/2006 have been fully considered but they are not persuasive.
19. Regarding the rejection to claims 68-75, made under 35 USC 101, applicant argues that the claimed invention "*could be implemented at least in part by a computing device*" and "*can be implemented in different manners including various hardware ...*" (page 14, second to last paragraph, of the response filed 6/22/2006). Applicant is directed to the rejection, as restated above. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994). (See MPEP 2106.IV.B.1).
20. Regarding claim 1, applicant argues: "*the two distinct acts of identifying and detecting as recited in claim 1. There is no discussion or mention in Yang of two such distinct acts as recited in claim 1*" (page 16, last paragraph, of the response



filed 6/22/2006). Applicant is directed to the rejection of claim 1 as restated above. Yang clearly recites detecting. Yang recites: *"our approach is to detect visual cues"* (page 2, left column, third paragraph). Yang further discloses the identifying by the use of identifiers. Yang recites: *"To reduce the complexity of frequency counting, we first cluster candidate elements according to similarity measurements between each element. These clusters are then labeled with unique identifiers"* (page 3, right column, last paragraph).

21. Regarding claim 6, applicant argues that: *"Yang discusses rules for comparing simple objects (see Table I and section 2.1), not determining whether a node can be divided"* (page 17, last paragraph of the response filed 6/22/2006). Applicant is directed to the rejection of claim 6 as restated above. In the quoted section of Yang, the nodes are defined as markup language objects that are either simple, container, group, list or structured document objects. Yang's simple object is defined as "non-breakable", and the group objects can be divided into simple objects.

22. Regarding applicant's arguments related to claims 2-5, 7-35 and 68-75, Yang disclose the claimed invention as restated above.

***Conclusion***

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Vaughn whose telephone number is (571) 272-4131. The examiner can normally be reached Monday to Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached at (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-2100.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory J. Vaughn  
Patent Examiner  
September 13, 2006



STEPHEN HONG  
SUPERVISORY PATENT EXAMINER